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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,635	08/18/2003	Robert S. Behl	2024728-7034083001	4444

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Bingham McCutchen, LLP
Suite 1800
Three Embarcadero
San Francisco, CA 94111-4067

EXAMINER

ROLLINS, ROSILAND STACIE

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/643,635

Applicant(s)

BEHL ET AL.

Examiner

Rosiland S. Rollins

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 67-82 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 67-82 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/9/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 67- 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burbank et al. (6312429) in view of Wampler (US 6165175) and further in view of Mahvi (2002/0022864).

In figure 11, Burbank et al. disclose a probe for deploying electrode arrays, comprising: a shaft having a distal end and a proximal end; a first array of electrodes (42) mounted on the shaft, the first array of electrodes having a retracted configuration and a deployed configuration; and a second array of electrodes (50) mounted on the shaft at a location spaced apart proximally from the first array of electrodes, the second array of electrodes having a retracted configuration and a deployed configuration; wherein at least one of the electrodes of the first array has an end that faces at least partially in a proximal direction, at least one of the electrodes of the second array has an end that faces at least partially in a distal direction, and the end of the at least one of the electrodes of the second array is located proximal to the end of the at least one of the electrodes of the first array when the first and the second arrays are deployed.

Burbank et al. teach all of the limitations of the claims except the first and second electrode array being electrically isolated from each other, a first connector coupled to the shaft for connecting the first electrode array to one pole of a power supply; and a second connector coupled to the shaft for connecting the second array to a second pole of the power supply.

Wampler et al. teach that it is old and well known in the art to construct electrosurgical instruments as bipolar devices by incorporating both the active and return electrodes into the electrosurgical instrument to substantially restrict the flow of current to the tissue that is placed between the electrodes. Wampler et al. also disclose that it is advantageous to use a bipolar device when cutting tissue as is the case with the electrode arrays of Burbank et al., to ensure that the flow of current is confined to the tissue in the instrument and to a significantly lesser extent to the tissue adjacent the instrument.

Mahvi teaches in figures 1-5, paragraphs (0009) and (0034)-(0040) that it is known in the art to electrically isolate electrode arrays so that independent voltages or currents or phases of either can be applied to each wire to precisely tailor the current flow. Mahvi also teaches that it is old and well known in the art to couple one pole of a RF power supply to a first electrode array (e.g. 22a, (0039)) and another pole of the RF power supply to a second electrode array (e.g., 22b, (0039)) and energizing the power supply to apply electrical current between the first and second array spaced at opposite edges of a tumor (0038)-(0039).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the electrode arrays of Burbank bipolar based on the Wampler et al. teaching that it is advantageous to use a bipolar device when cutting tissue as is the case with the electrode arrays of Burbank, to ensure that the flow of current is confined to the tissue in the instrument and to a significantly lesser extent to the tissue adjacent the instrument. It would have also been obvious based on the Mahvi teaching that the structural bipolar connection of electrode arrays are old and well known in the art.

Regarding claim 68, Burbank et al. illustrate each of the electrodes of the first and the second arrays everting away from the shaft as it is being deployed.

Regarding claim 69, Burbank et al. disclose at least one cavity (37) for receiving the first and the second arrays of electrodes when the first and the second arrays of electrodes are retracted.

Regarding claim 70, Burbank et al. disclose at least one cavity (37) for receiving the first array of electrodes when the first array of electrodes is retracted, and at least a second cavity (39) for receiving the second array of electrodes when the second array of electrodes is retracted.

Regarding claim 71, Burbank et al. disclose a first rod (44) connected to the first electrode array and slidably disposed in the shaft; and a second rod (54) connected to the second electrode array and slidably disposed in the shaft.

Regarding claim 72, in column 5 lines 11-15, Burbank et al. teach that either or both of the first and the second arrays of electrodes span a planar area in the range between 3 cm² to 20 cm².

Regarding claim 74, Burbank et al. illustrate the first and the second arrays of electrodes each having a concave face when deployed.

Regarding claim 76, Burbank et al. disclose a probe for deploying electrode arrays, comprising: a first tube (32) having a distal end, a proximal end, and a lumen extending between the ends; a first array of electrodes (50) at least partially disposed within the lumen of the first tube, the first array of electrodes having a retracted configuration and a deployed configuration; a second tube (31) located next to the first tube, the second tube having a distal end, a proximal end, and a lumen extending between the ends; and a second array of electrodes at least partially disposed within the lumen of the second tube, the second array of electrodes having a retracted configuration and a deployed configuration; wherein at least one of the electrodes of the first array has an end that faces at least partially in a proximal direction, at least one of the electrodes of the second array has an end that faces at least partially in a distal direction, and the end of the at least one of the electrodes of the second array is located proximal to the end of the at least one of the electrodes of the first array when the first and the second arrays are deployed.

Regarding claims 73 and 79, Burbank et al. teach all of the limitations of the claims the first and the second arrays of electrodes being spaced at least 2 cm from each other when they are deployed. To have provided the first and second array of

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electrodes such that they are spaced at least 2 cm from each other when they are deployed would have been an obvious modification to an artisan since it has been held that rearranging parts of an invention involves only routine skill in the art.

Response to Arguments

Applicant's arguments with respect to claims 67-72, 74, 76-78, 80 and 81 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that incorporating Wampler's bi-polar electrosurgery device or Mahvi's ablation electrode into Burbank's respective pluralities of locator wires would result in a thermal ablation of the tissue between the locator wires instead of cutting the tissue directly in front of the locator wires. Examiner respectfully disagrees with this argument since it is the amount of energy that is applied to the device that determines whether the tissue will be cut or ablated. The teachings of Wampler and Mahvi offer structural modifications to the Burbank device. These modifications do not preclude Burbank from using energy to cut tissue.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

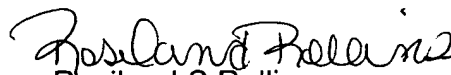
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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rosiland S. Rollins whose telephone number is (571) 272-4772. The examiner can normally be reached on Mon.-Fri. 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Rosiland S Rollins
Primary Examiner
Art Unit 3739